VALUE ENGINEERING TEAM STUDY

EXECUTIVE SUMMARY

Value Engineering is a process used to study the functions a project is to provide. As a result, it takes a critical look at how these functions are met and develops alternative ways to achieve the same function while increasing the value of the project. In the end, it is hoped that the project will realize a reduction in cost, but adding value over reducing cost is the focus of VE.

The Value Engineering Study was initiated during the week of 13 – 17 December 1999 at the New Orleans District Office. A site tour of the project was conducted on 13 December 1999 for the VE Team, and the basis of the study was the Intracoastal Waterways Locks, LA, Feasibility Study currently being completed.

The project was studied using the Corps of Engineers standard Value Engineering (VE) methodology, consisting of five phases:

<u>Information Phase</u>: The Team studied drawings, figures, descriptions of project work, and cost estimates to fully understand the work to be performed and the functions to be achieved. Cost Models (see Appendix C) were compared to determine areas of relative high cost to ensure that the team focused on those parts of the project which offered the most potential for adding value or cost savings.

<u>Speculation Phase</u>: The Team speculated by conducting brainstorming sessions to generate ideas for alternative designs. All team members contributed ideas and critical analysis of the ideas was discouraged (see Appendix B).

<u>Analysis Phase</u>: Evaluation, testing and critical analysis of all ideas generated during speculation was performed to determine potential for added value, cost savings and possibilities for risk. Ideas were ranked by priority for development. Ideas which did not survive critical analysis were deleted.

<u>Development Phase</u>: The priority ideas were developed into written proposals by VE team members during an intensive technical development session. Proposal descriptions, along with sketches, technical support documentation, and cost estimates were prepared to support implementation of ideas. Additional VE Team Comments were included for items of interest which were not developed as proposals, and these comments follow the study proposals.

<u>Presentation Phase</u>: Presentation is a two-step process. First, the published VE Study Report is distributed for review by project supporters and decision makers. A briefing is later conducted to decide which proposals merit implementation into project design. The Summary of Proposals follows on the next page.

In-house Design Team staff were consulted and participated in the study. A list of the VE Team and staff consulted appears in Appendix A.